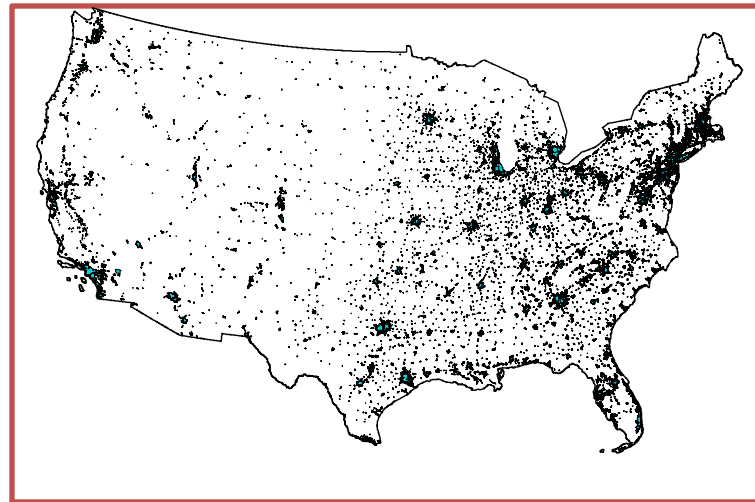


2010 Census Urban Area Delineation Program

Michael Ratcliffe
Geography Division
U.S. Census Bureau

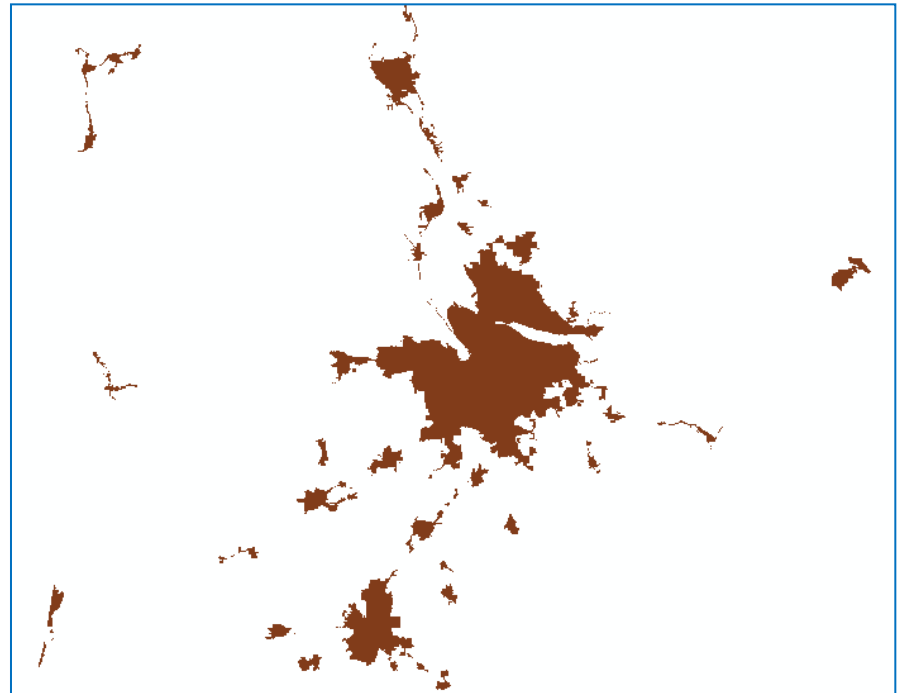
Urban and Rural Classification

- The Census Bureau identifies and classifies urban and rural areas after each decennial census.
- Urban areas of at least 2,500 people have been identified since 1906.
- Urbanized areas of 50,000 or more people were first defined for the 1950 Census. Urban places of at least 2,500 people were identified outside urbanized areas. Urban clusters of 2,500 - 49,999 were first defined after Census 2000.
- The Census Bureau identifies urban and rural areas solely for the purpose of tabulating and presenting statistical data.



Urban Area Definitions

- Represent densely developed territory, encompassing residential, commercial, and other non-residential urban land uses in which social and economic interactions occur.
- Represent the “Urban Footprint”
- Structure has been explicitly defined through measures based primarily on population counts and residential population density
- Criteria have also accounted for non-residential urban land uses that are functionally part of the urban landscape

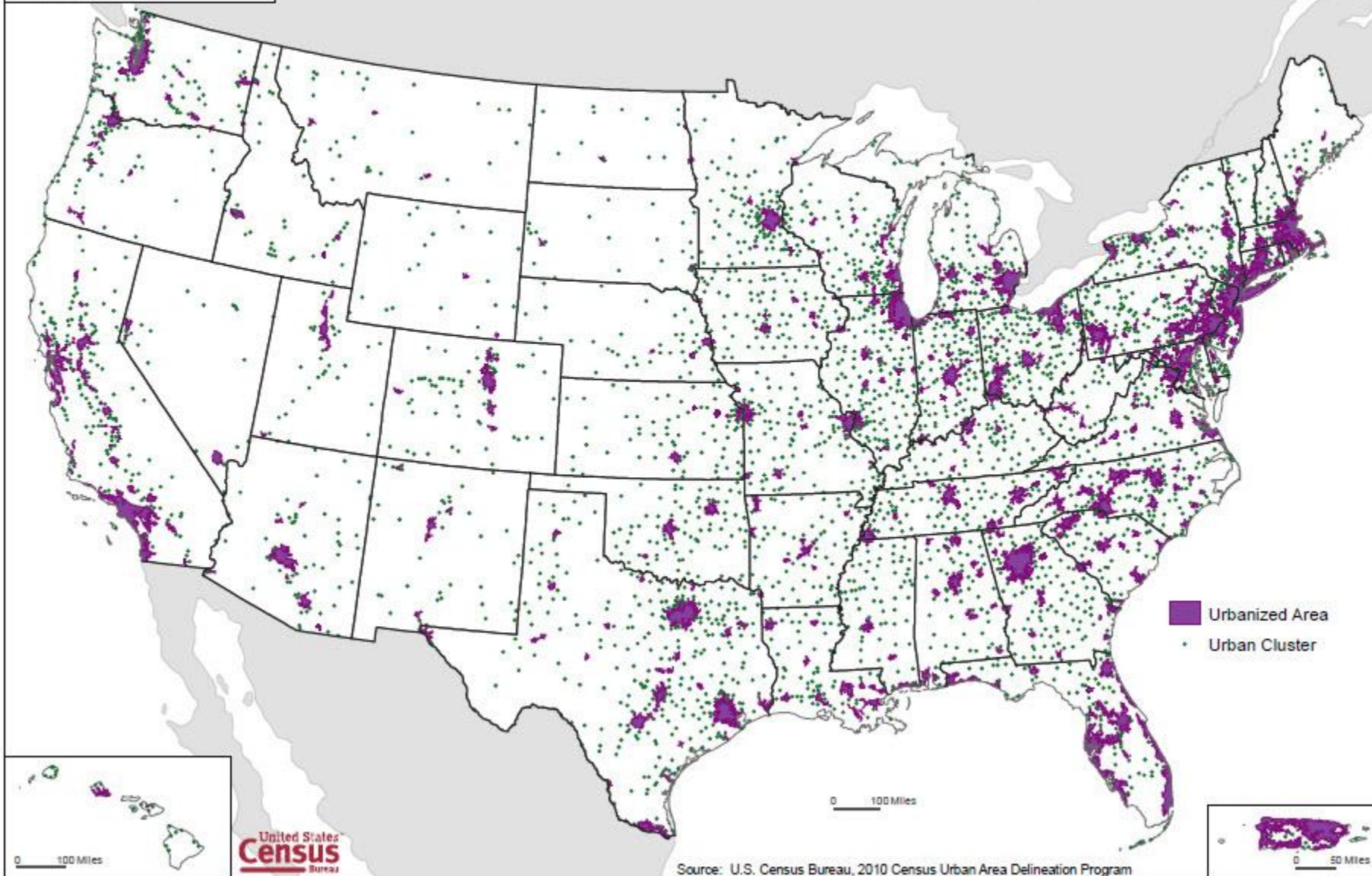
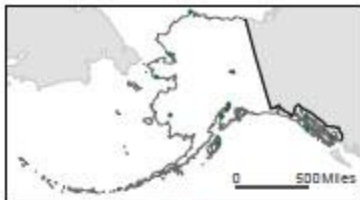


2010 Urban Area Program

- Remain committed to an objective, equitable, and consistent nationwide urban area delineation.
- Retain decennial comparability by building upon 2000 criteria.
- All potential modifications are refinements, or supplements to address deficiencies encountered for Census 2000.



Urbanized Areas and Urban Clusters: 2010



Number of Urban Areas in 2010 in the US

- 3,573 urban areas
 - 486 urbanized areas (UAs)
 - 3,087 urban clusters (UCs)
- 36 new urbanized areas
- 3 areas lost urbanized area status
 - Danville, VA
 - Sandusky, OH
 - Galveston, TX

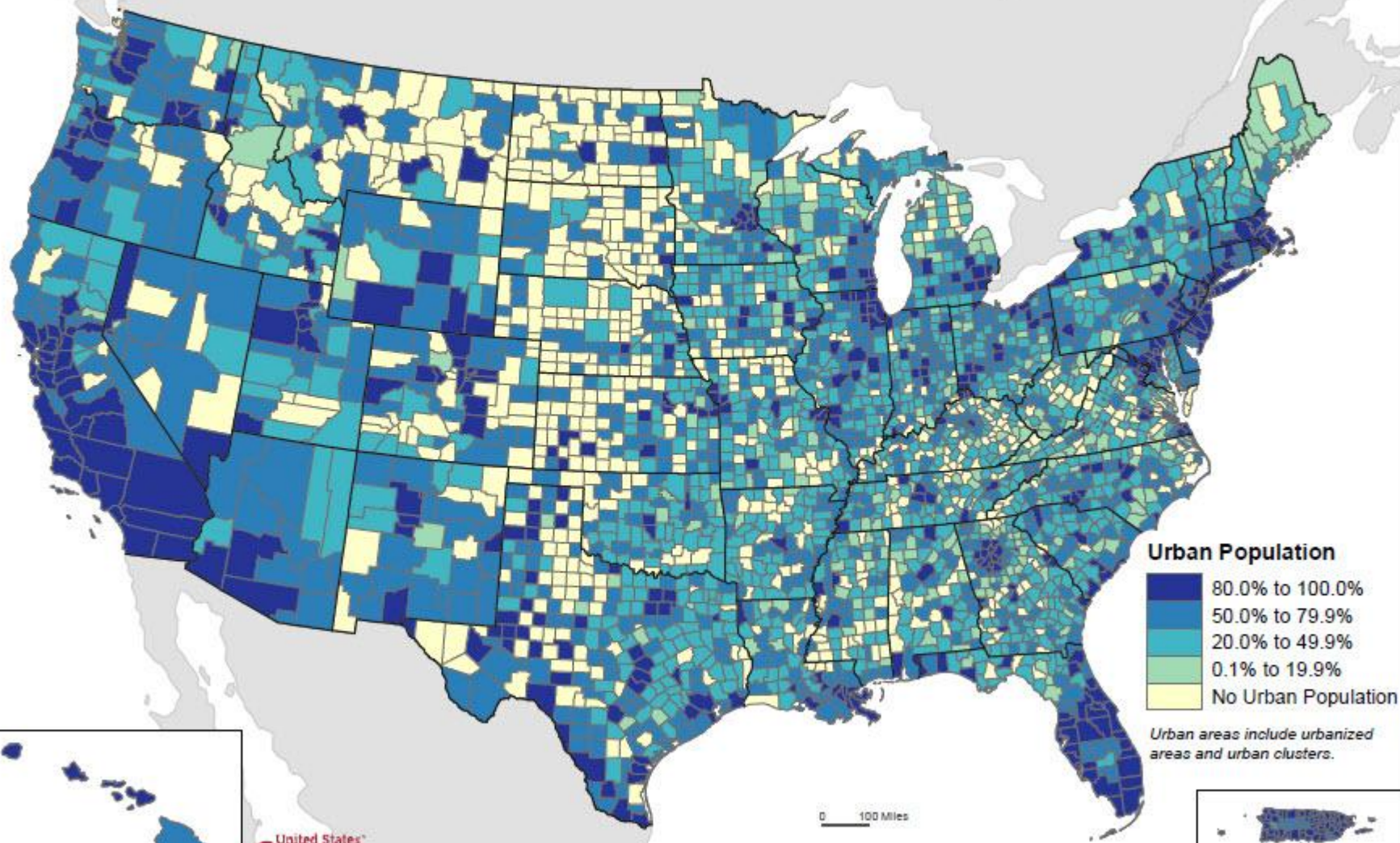
Puerto Rico: 19 urban areas, 11 UAs, 8 UCs

Urban and Rural Populations in the United States in 2010 and 2000

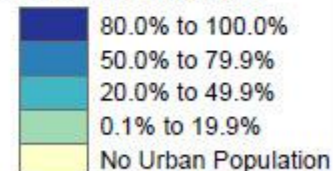
	2010 Population	2010 Percent	2000 Population	2000 Percent
Urban	249,253,271	80.7	222,360,539	79.0
Urbanized Area	219,922,123	71.2	192,323,824	68.3
Urban Cluster	29,331,148	9.5	30,036,715	10.7
Rural	59,492,267	19.3	59,061,367	21.0

Puerto Rico: 93.8% urban, 90.7% urbanized

Percent Population Residing in Urban Areas by County: 2010



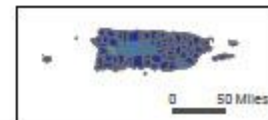
Urban Population



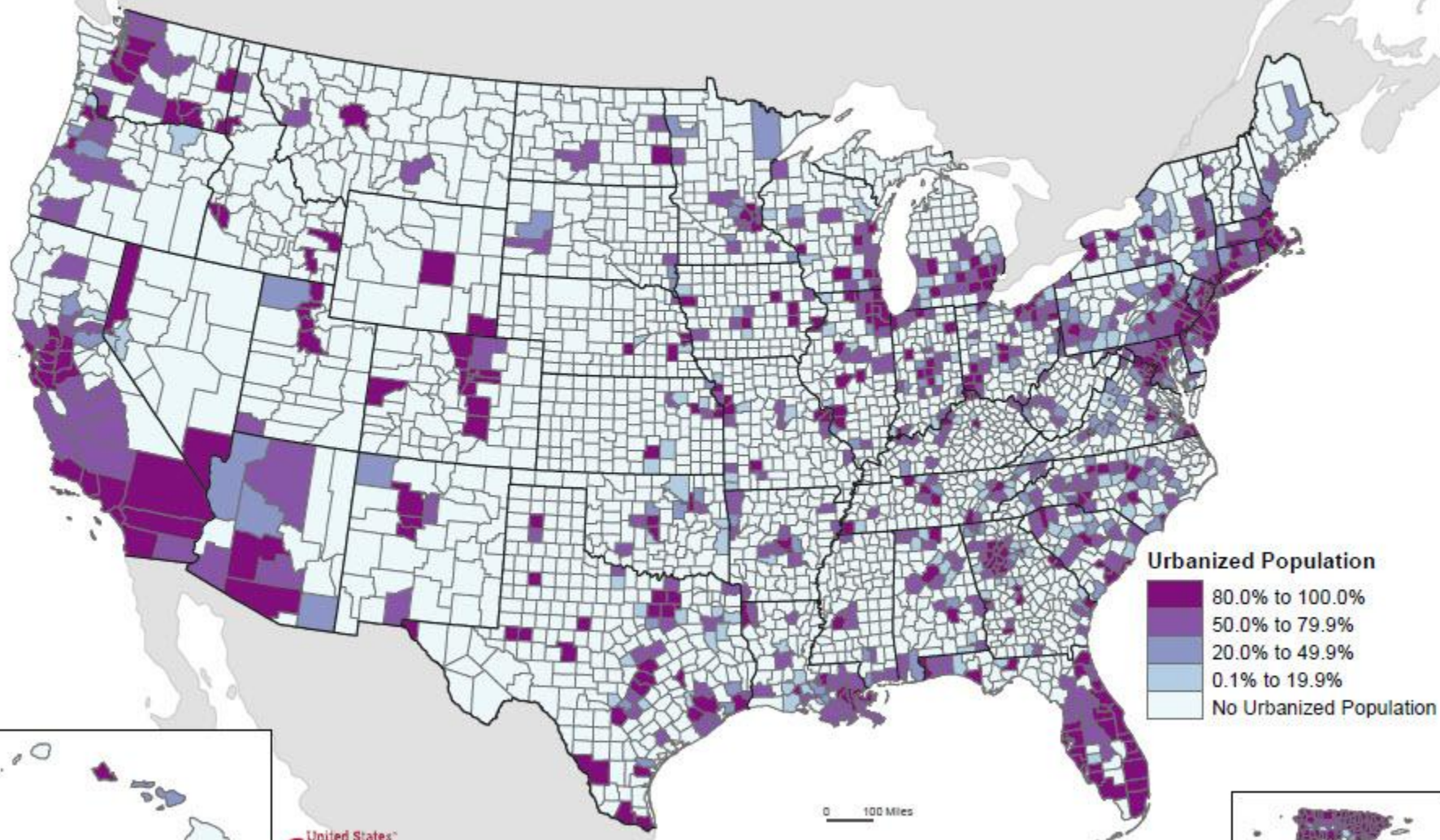
Urban areas include urbanized areas and urban clusters.

United States[®]
Census
Bureau

Source: U.S. Census Bureau, 2010 Census Urban Area Delinication Program



Percent Population Residing in Urbanized Areas by County: 2010



United States
Census
Bureau

Source: U.S. Census Bureau, 2010 Census Urban Area Delineation Program

Percent Urban Population

State	Percent
District of Columbia	100
California	94.9
New Jersey	94.7
Nevada	94.2
Puerto Rico	93.8



Montana	55.9
Mississippi	49.4
West Virginia	48.7
Vermont	38.9
Maine	38.7

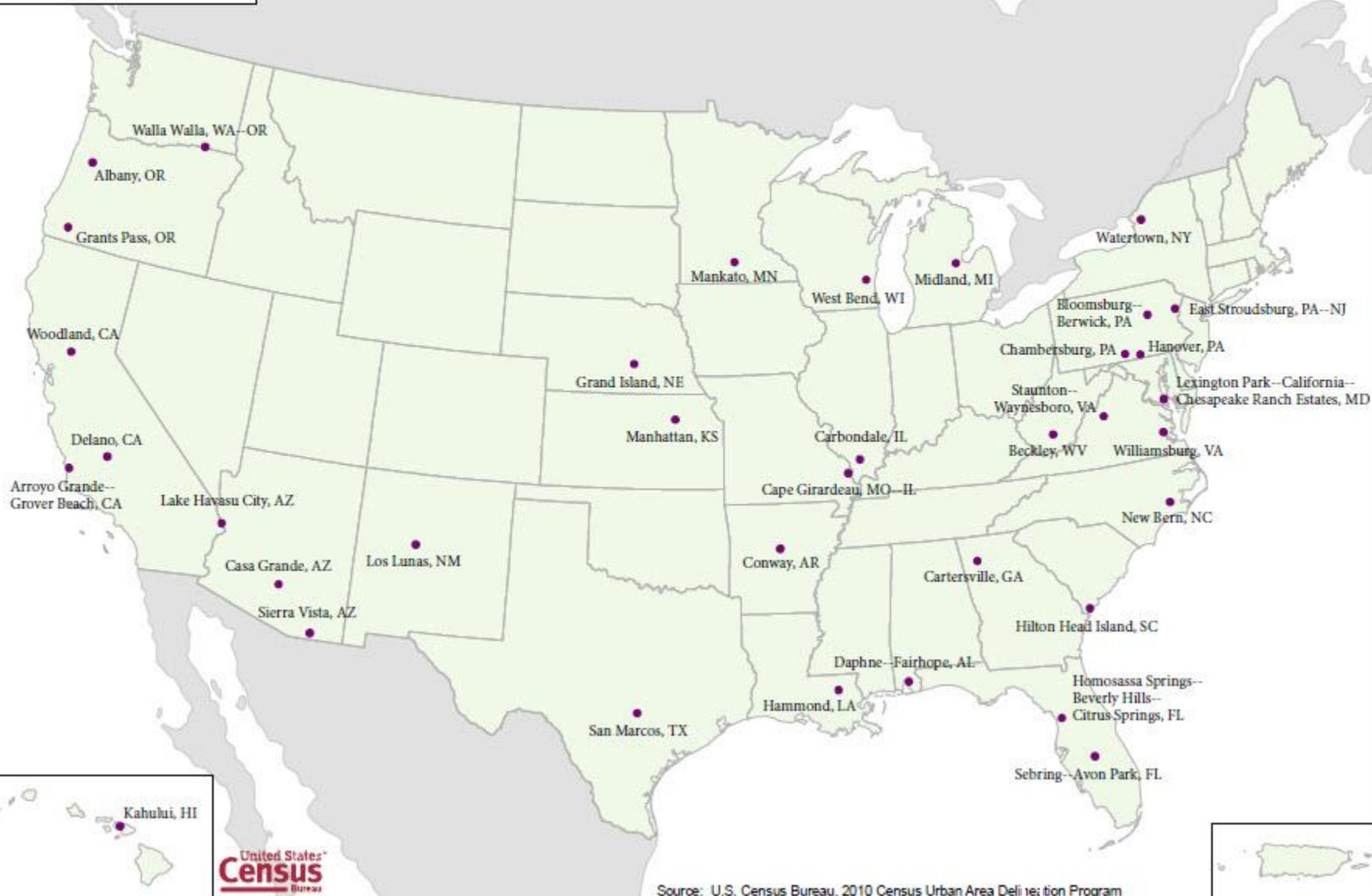
Percent Urbanized Population

State	Percent
District of Columbia	100
New Jersey	92.2
Puerto Rico	90.7
Rhode Island	90.5
Massachussetts	90.3

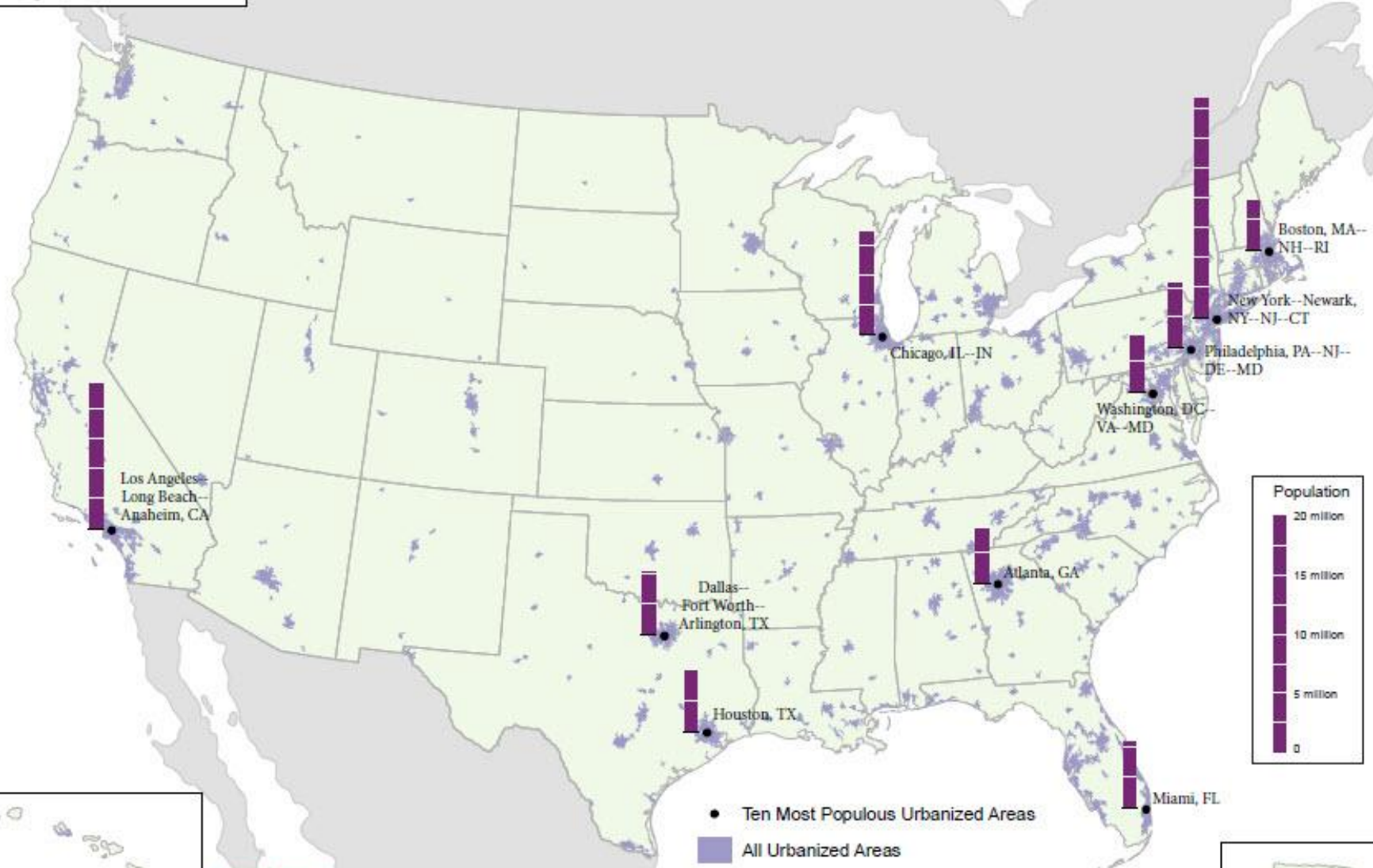


Mississippi	27.6
Montana	26.5
Maine	26.2
West Virginia	24.5
Vermont	17.4

New Urbanized Areas: 2010



Ten Most Populous Urbanized Areas: 2010



Top Ten Most Populous Urban Areas in 2010 and 2000

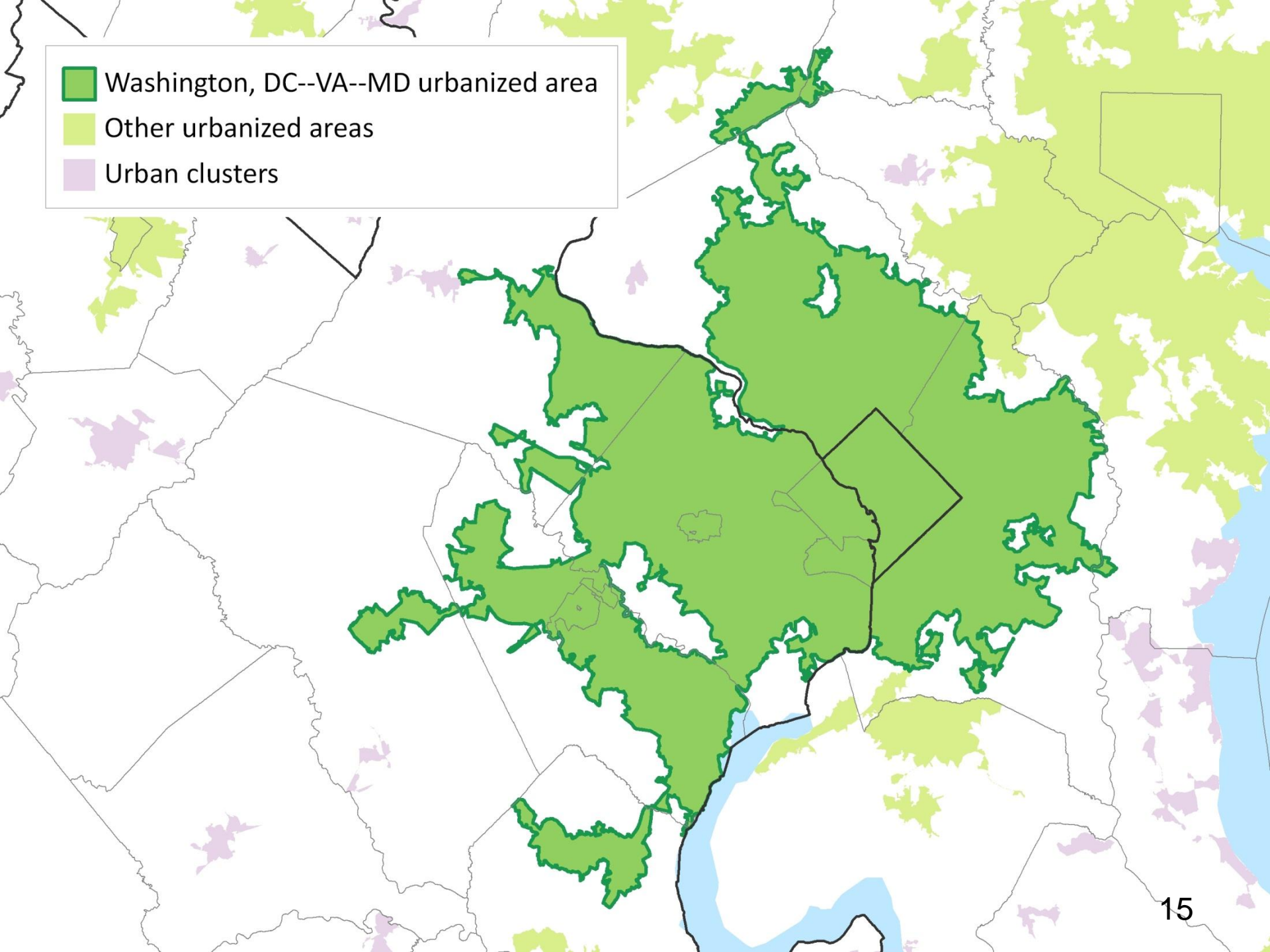
2010 Urban Area	2010 Pop	2000 Urban Area	2000 Pop
New York--Newark, NY--NJ--CT	18,351,295	New York--Newark, NY--NJ--CT	17,799,861
Los Angeles--Long Beach--Anaheim, CA	12,150,996	Los Angeles--Long Beach--Santa Ana, CA	11,789,487
Chicago, IL--IN	8,608,208	Chicago, IL--IN	8,307,904
Miami, FL	5,502,379	Philadelphia, PA--NJ--DE--MD	5,149,079
Philadelphia, PA--NJ--DE--MD	5,441,567	Miami, FL	4,919,036
Dallas--Fort Worth--Arlington, TX	5,121,892	Dallas--Fort Worth--Arlington, TX	4,145,659
Houston, TX	4,944,332	Boston, MA--NH--RI	4,032,484
Washington, DC--VA--MD	4,586,770	Washington, DC--VA--MD	3,933,920
Atlanta, GA	4,515,419	Detroit, MI	3,903,377
Boston, MA--NH--RI	4,181,019	Houston, TX	3,822,509

Top Ten Most Densely Populated Urbanized Areas in 2010

Urbanized Area	Population	Land Area (sq. mi)	Population Density
Los Angeles--Long Beach--Anaheim, CA	12,150,996	1,736.02	6,999.3
San Francisco--Oakland, CA	3,281,212	523.62	6,266.4
San Jose, CA	1,664,496	285.98	5,820.3
Delano, CA	54,372	9.92	5,482.7
New York--Newark, NY--NJ--CT	18,351,295	3,452.20	5,318.9
Davis, CA	72,794	14.12	5,156.6
Lompoc, CA	51,509	10.70	4,815.7
Urban Honolulu, HI	802,459	170.17	4,715.6
Woodland, CA	55,513	12.19	4,550.8
Las Vegas--Henderson, NV	1,886,011	416.84	4,524.5

Note: 16 of the top 20 most densely populated urbanized areas in the U.S. are in California

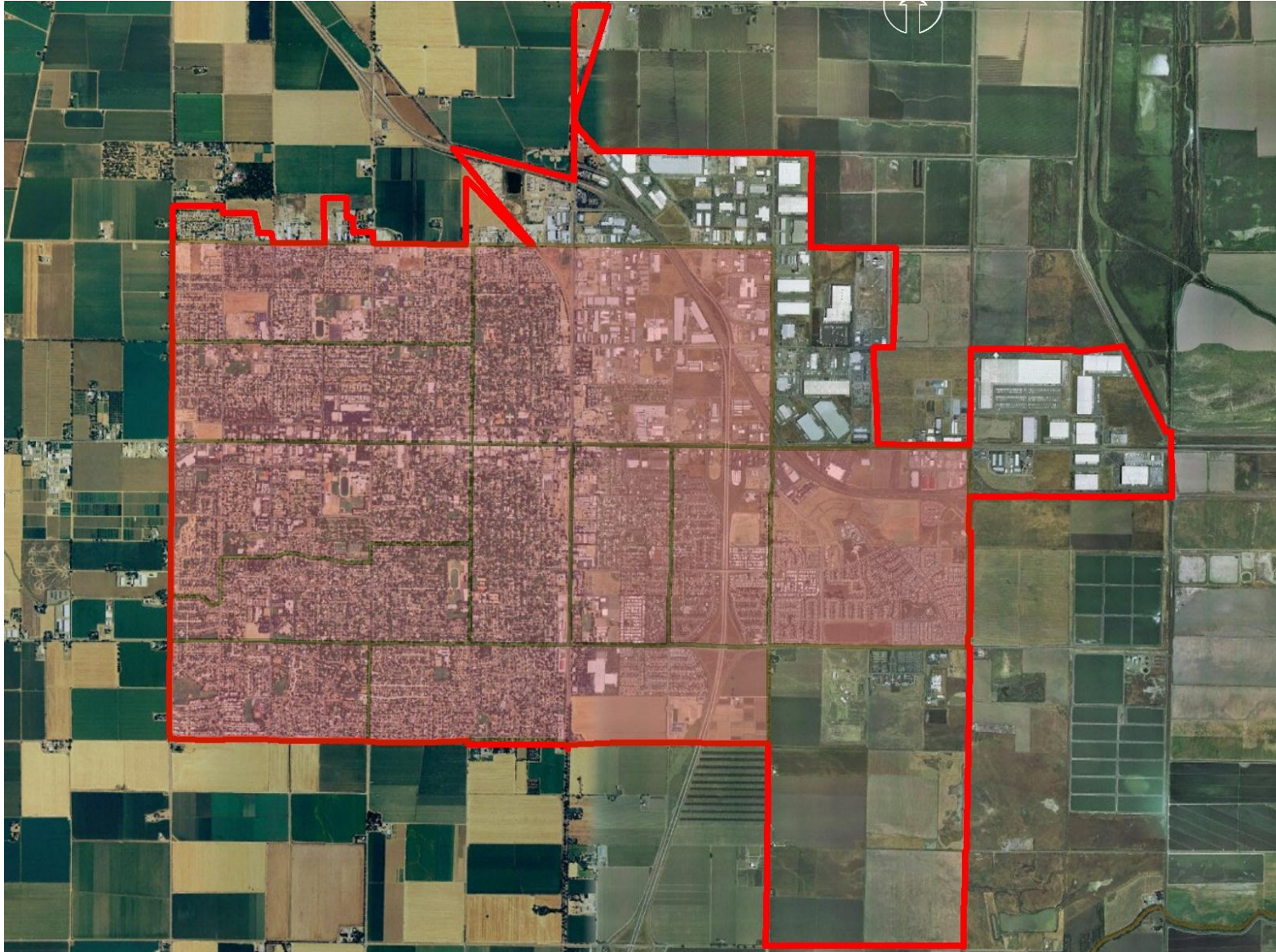
Note: The most dense urban area is the Richgrove, CA Urban Cluster with a population density of 10,016 people per Square mile. The UC has a population of 2,867 and a land area of around 0.29 square miles

- 
- A map showing the Washington, DC--VA--MD urbanized area in dark green, other urbanized areas in light green, and urban clusters in purple. The map includes a legend in the top-left corner and a page number '15' in the bottom-right corner. The urbanized area is a large, irregularly shaped region covering parts of Virginia, Maryland, and the District of Columbia. It is surrounded by other urbanized areas and urban clusters. The map also shows state boundaries and the Chesapeake Bay.
- Washington, DC--VA--MD urbanized area
 - Other urbanized areas
 - Urban clusters

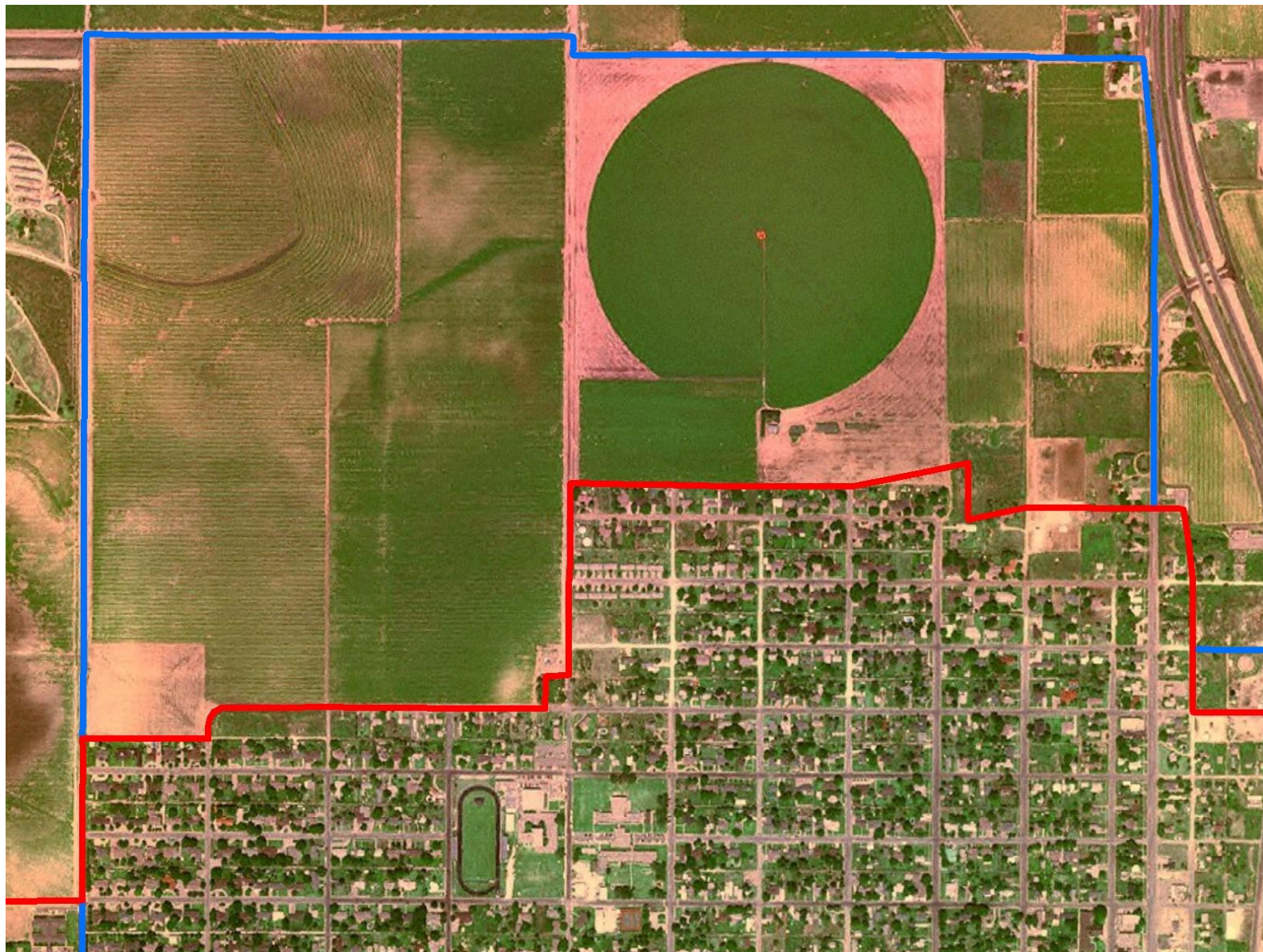
Criteria Changes from 2000 to 2010

Criteria	2000	2010
Building Blocks	Block groups and blocks	Tracts and blocks
Impervious	N/A	Used NLCD impervious land cover
Exempted Territory	Water, national parks, national monuments	Water
Hops and Jumps	Hop (0.5 miles), jump (2.5 miles), hop (0.5 miles)	Hop (0.5 miles), jump (2.5 miles)
Split/Merge	Splits guided by metro areas	Splits guided by 2000 UAs (utilized places). Merge to maintain status
Airports	10,000 min enplanement	2,500 min enplanement
Institutional GQ	N/A	At least 1,500 outside
Military	Adjusted density of high count military blocks	No density adjustment
Central Places	Identified	Not identified. Principal cities of CBSAs can be used instead.

Tracts As Building Blocks: Woodland, CA

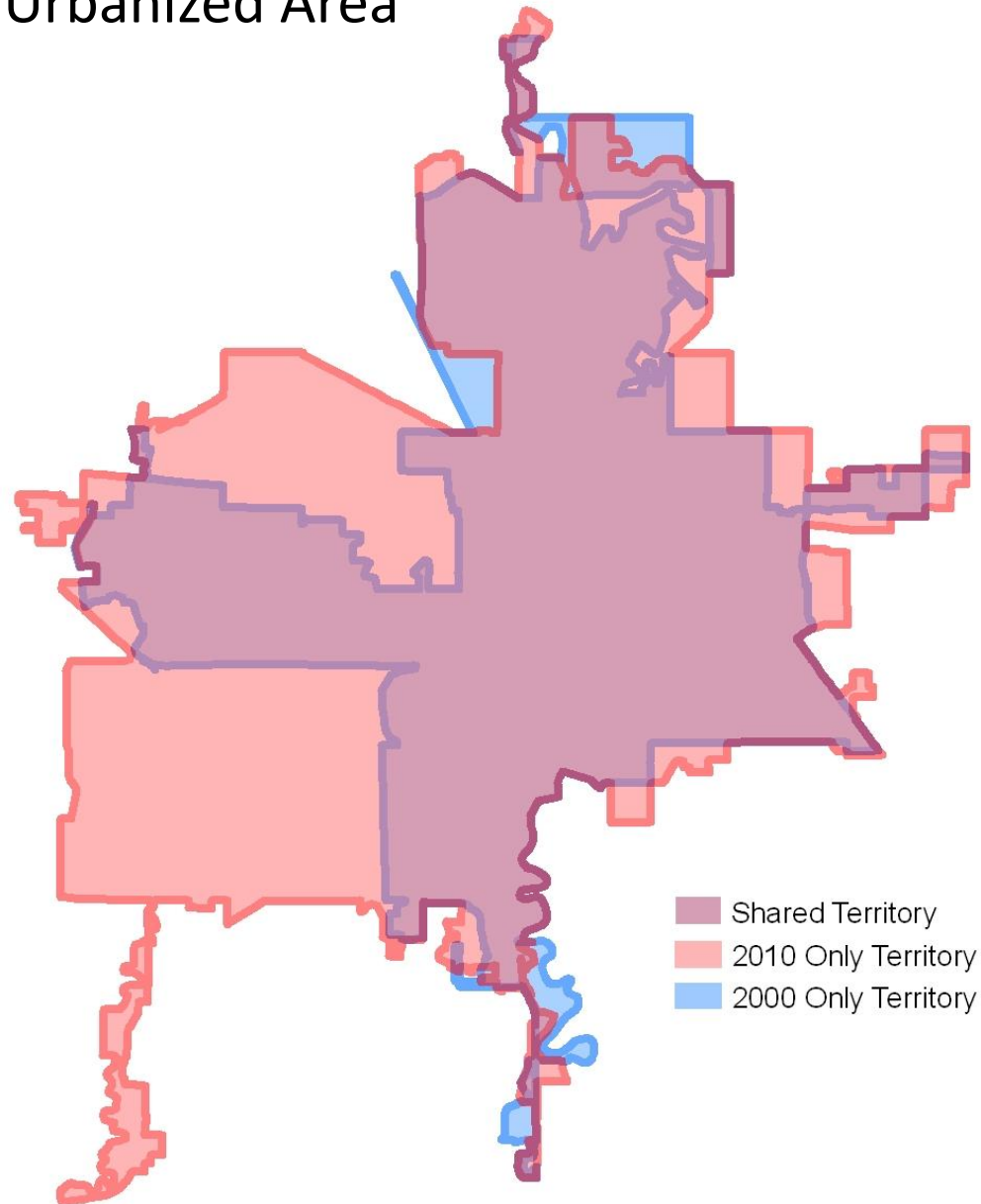


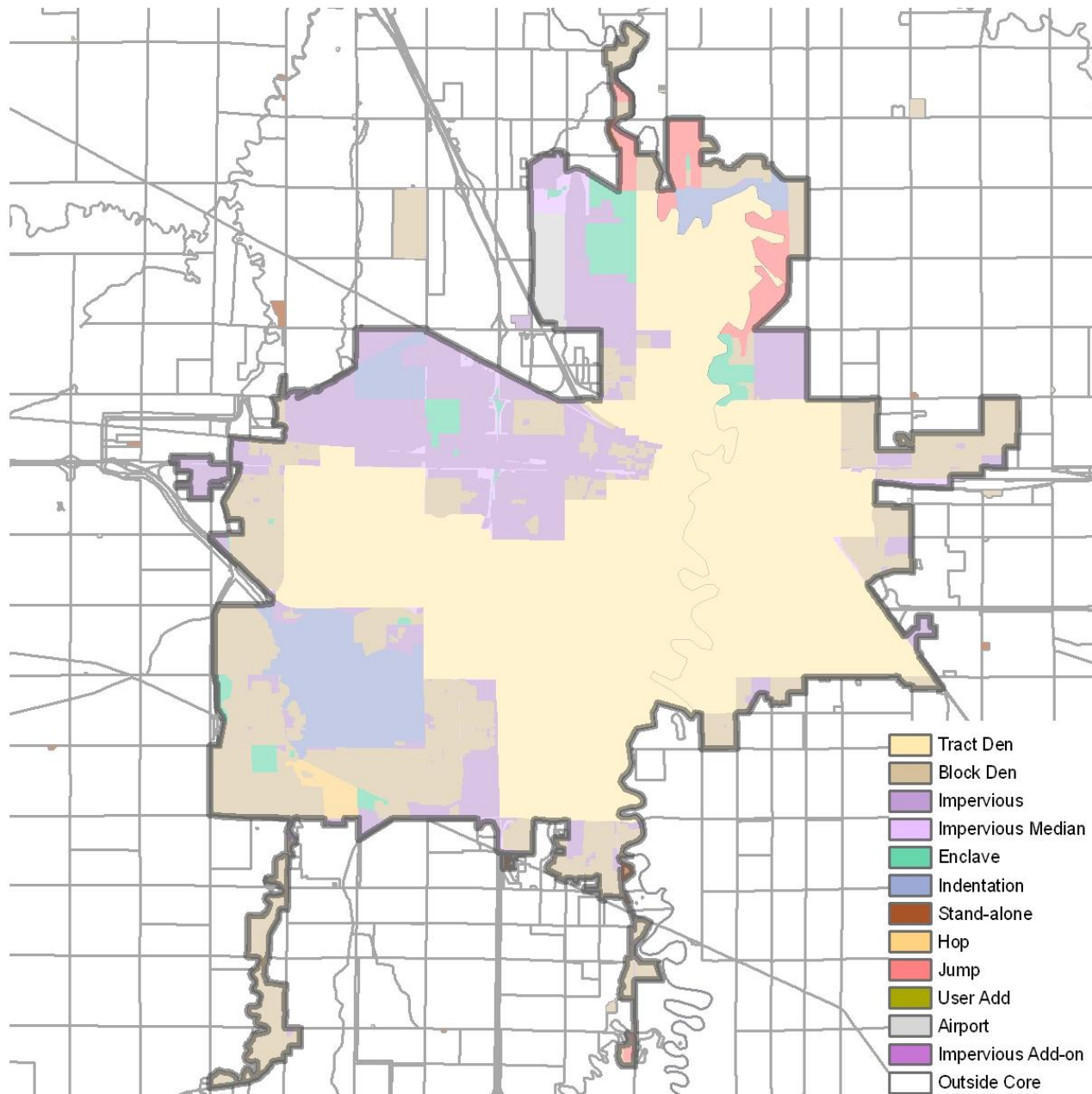
Block Group to Tract Criteria Change: Tahoka, TX



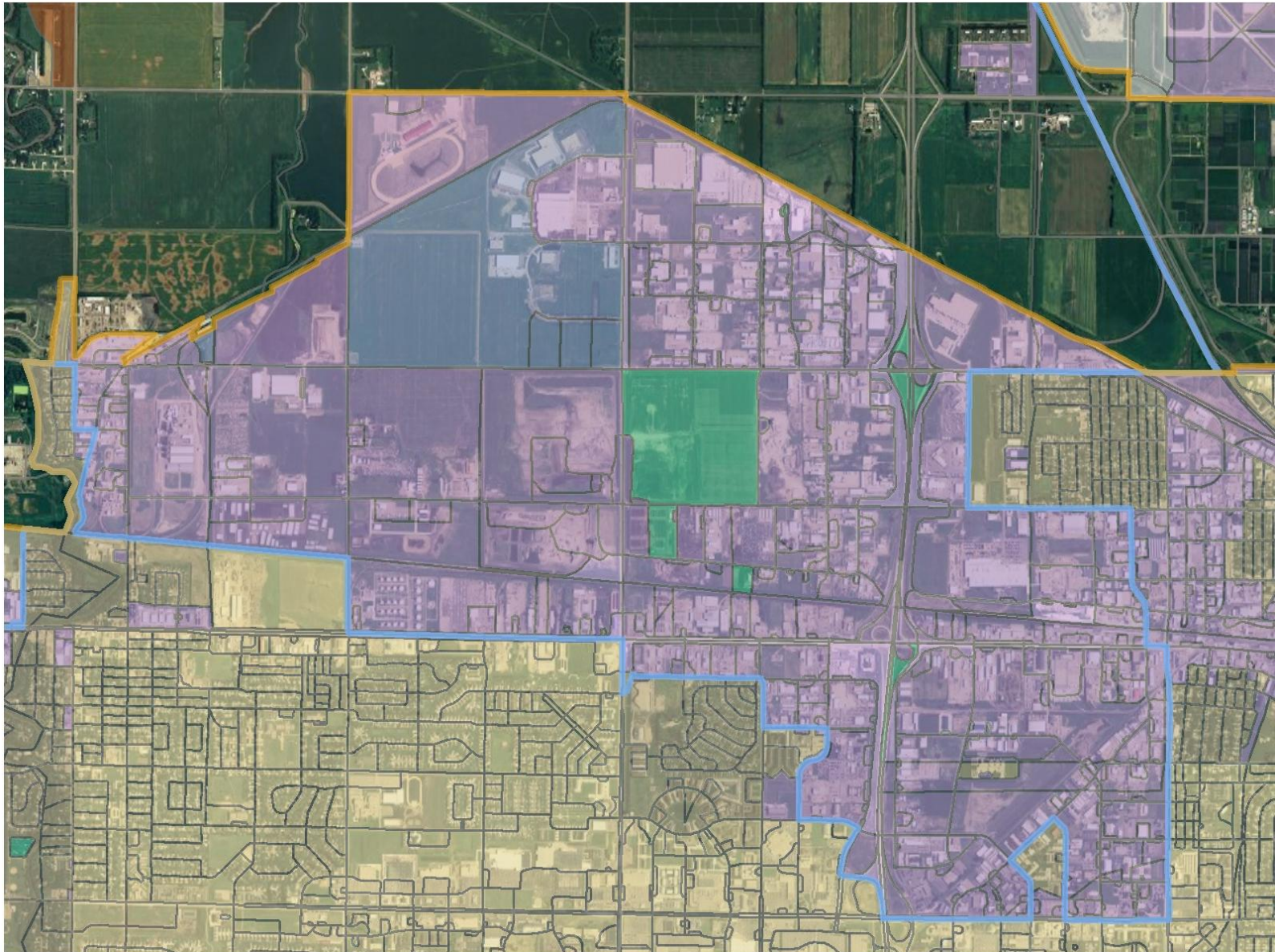
Fargo ND—MN Urbanized Area

2010 vs. 2000

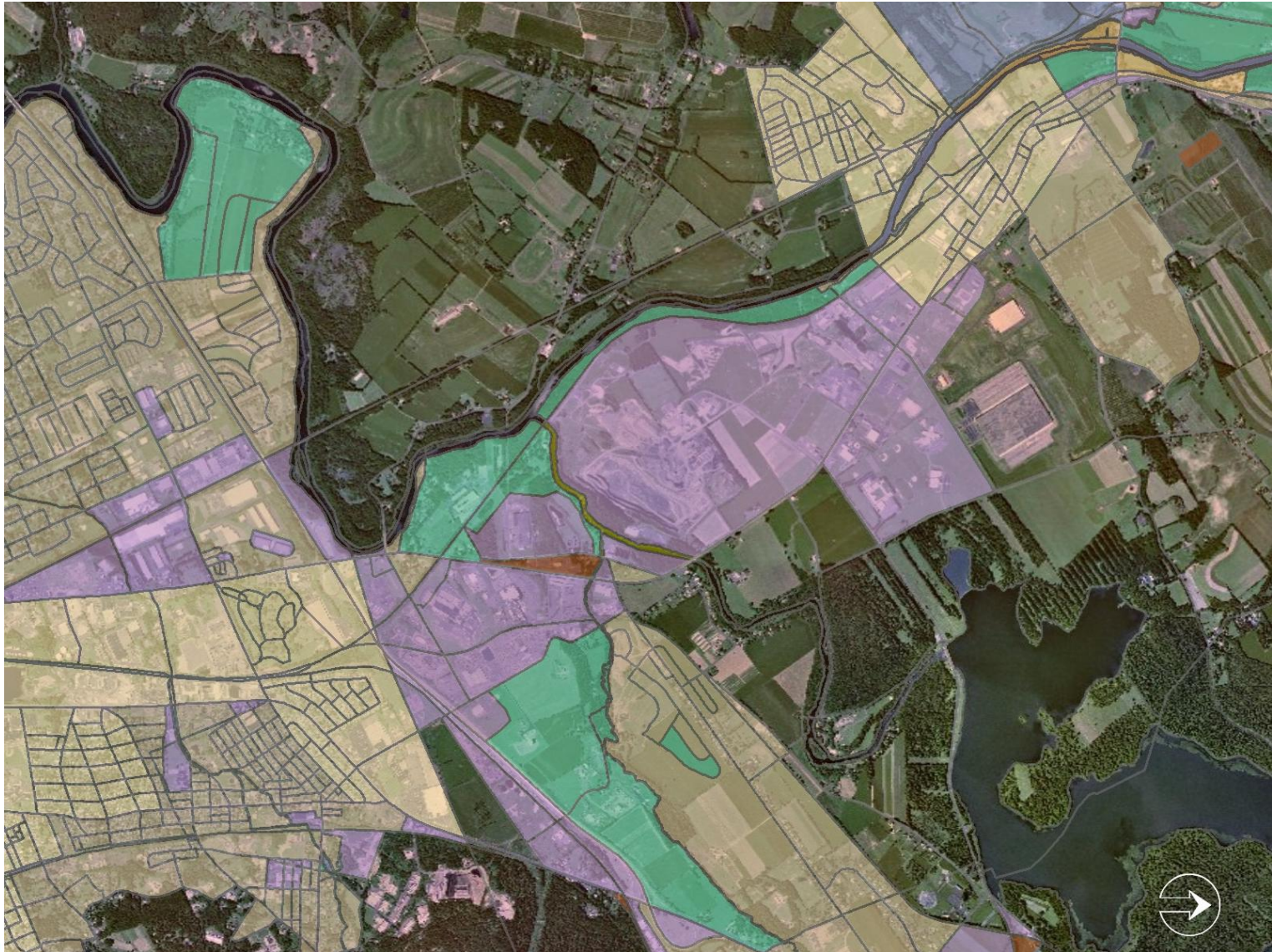




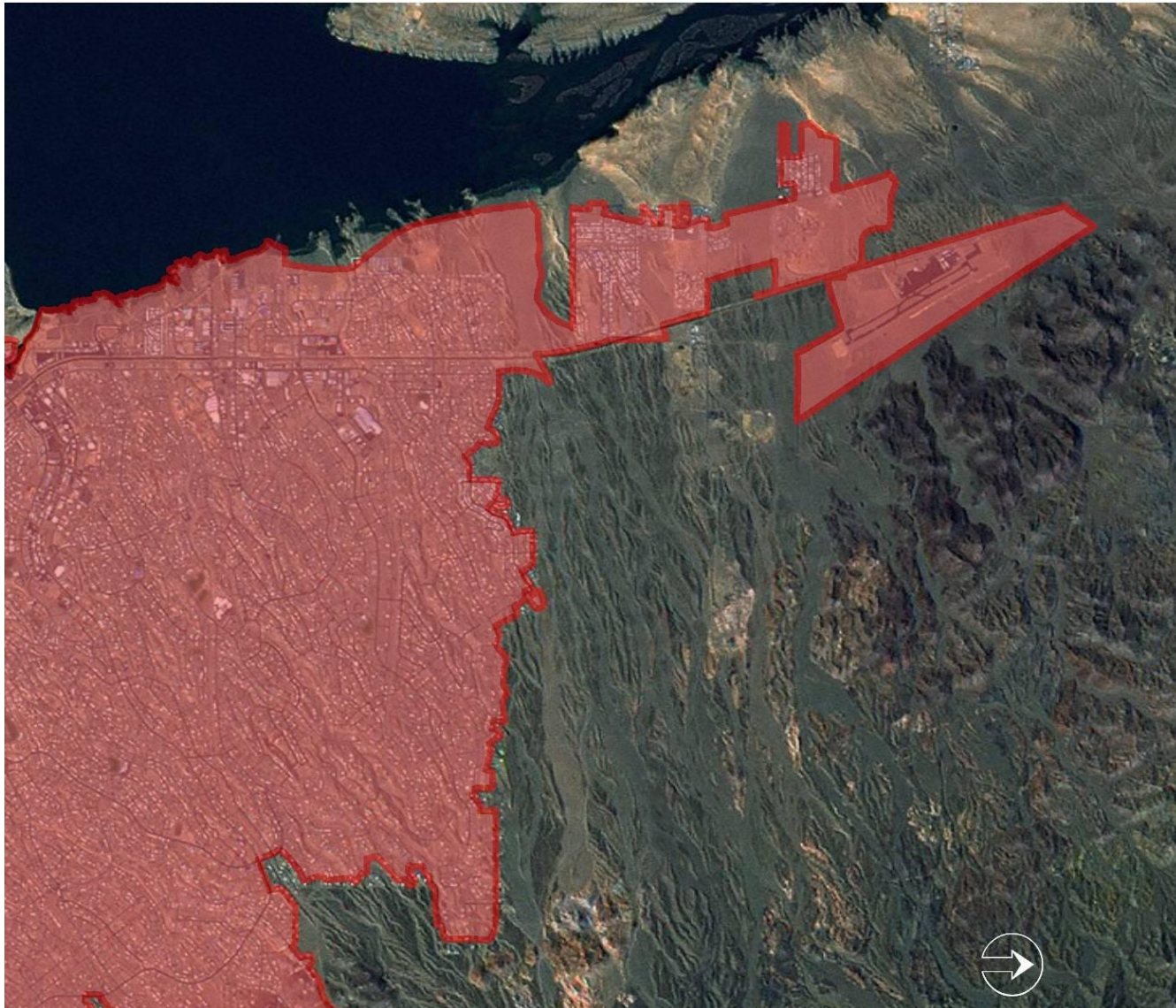
Impervious Surface Criteria



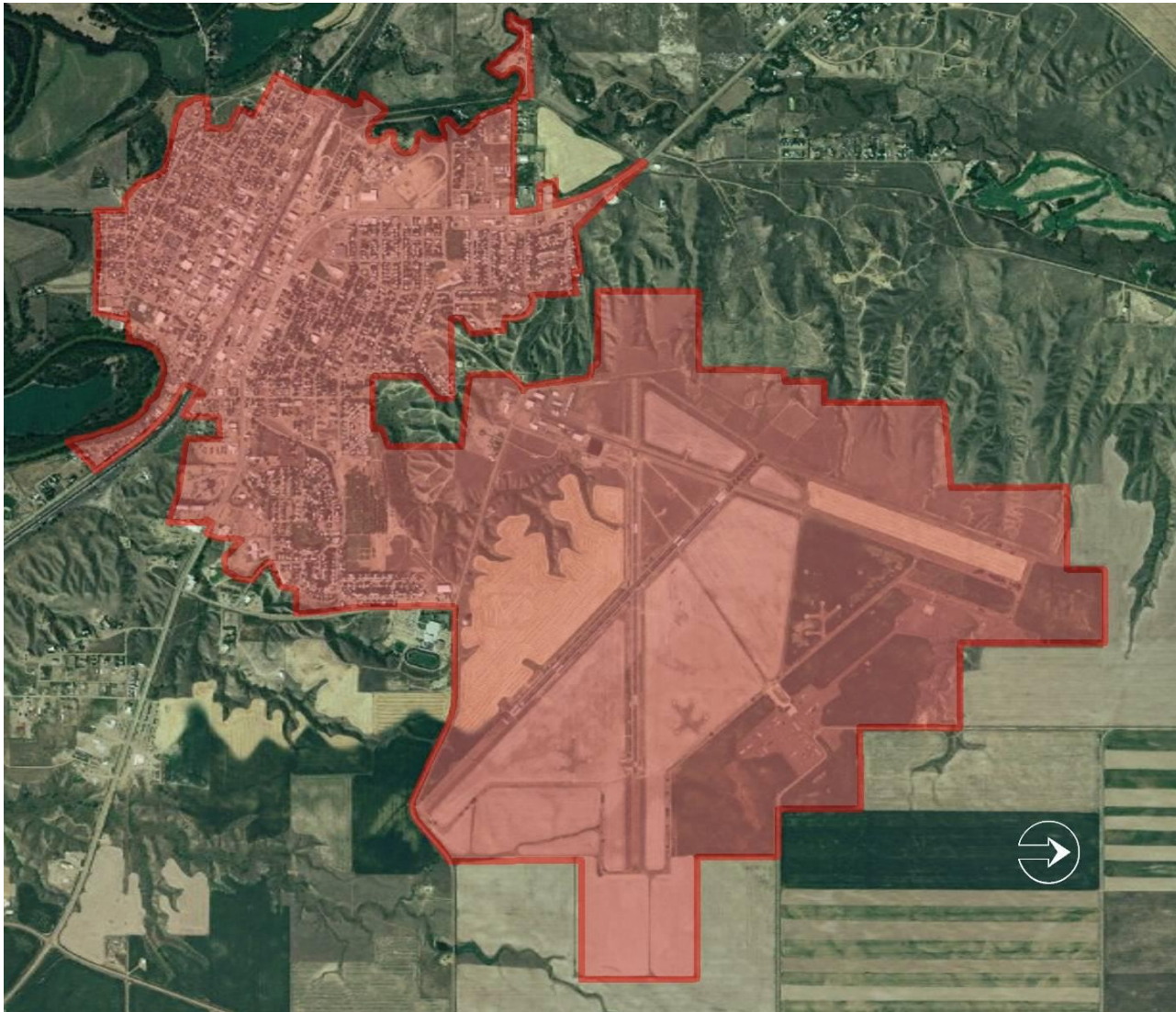
Impervious Bridging of Urban Cores



Airport Addition in Lake Havasu, AZ



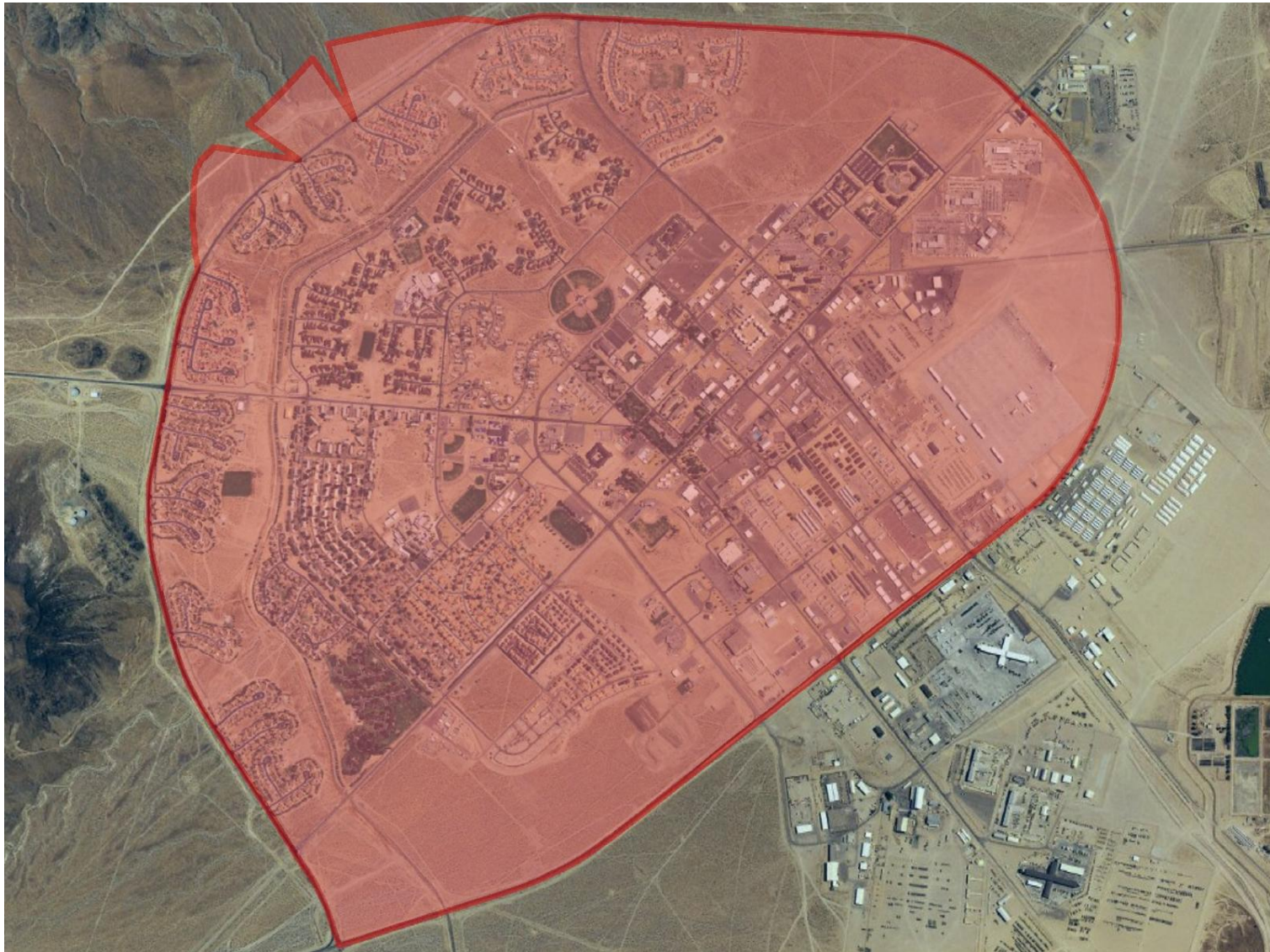
Airport Addition in Glasgow, MT



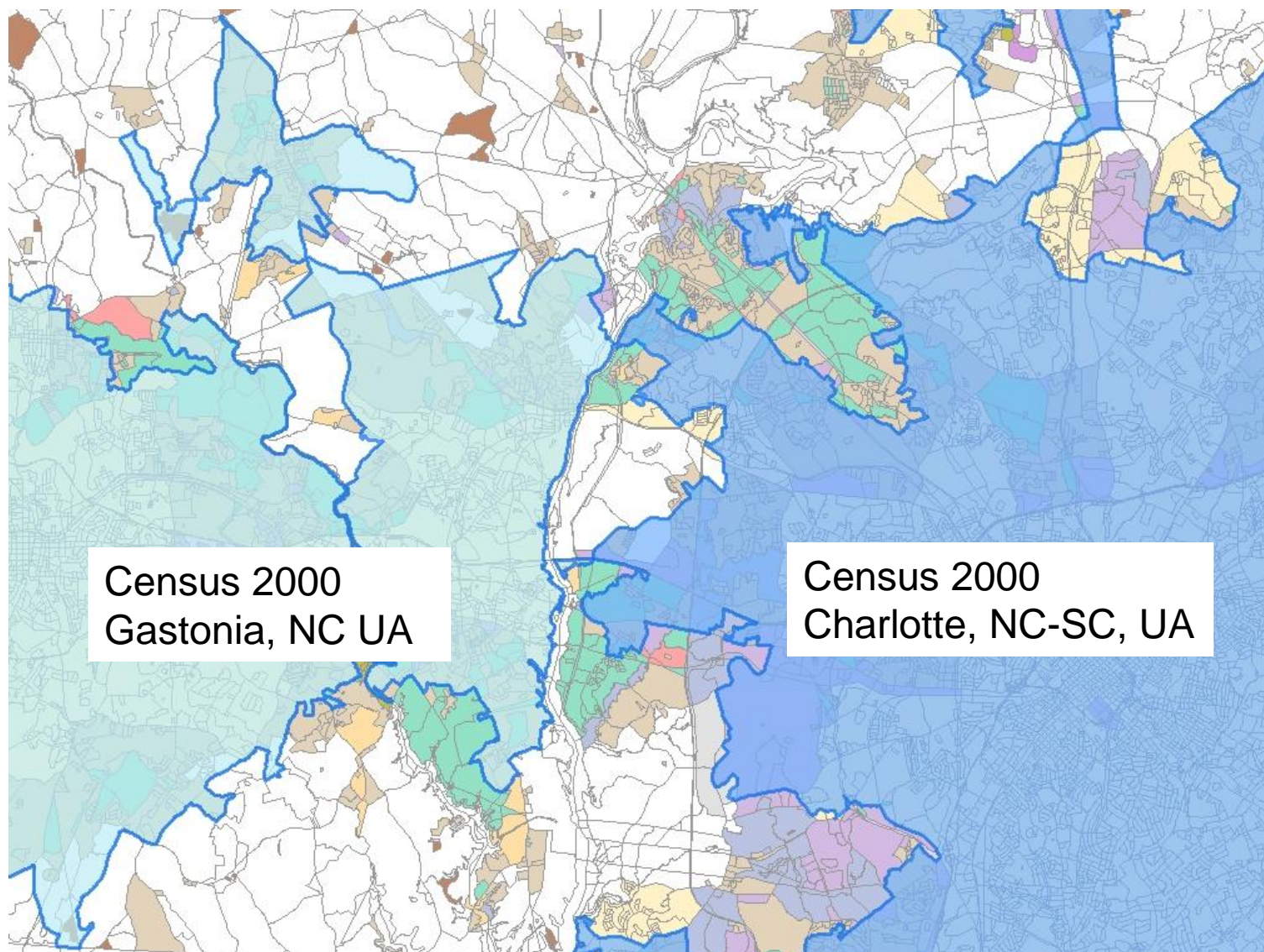
Fort Irwin, CA Boundaries in 2000 and 2010



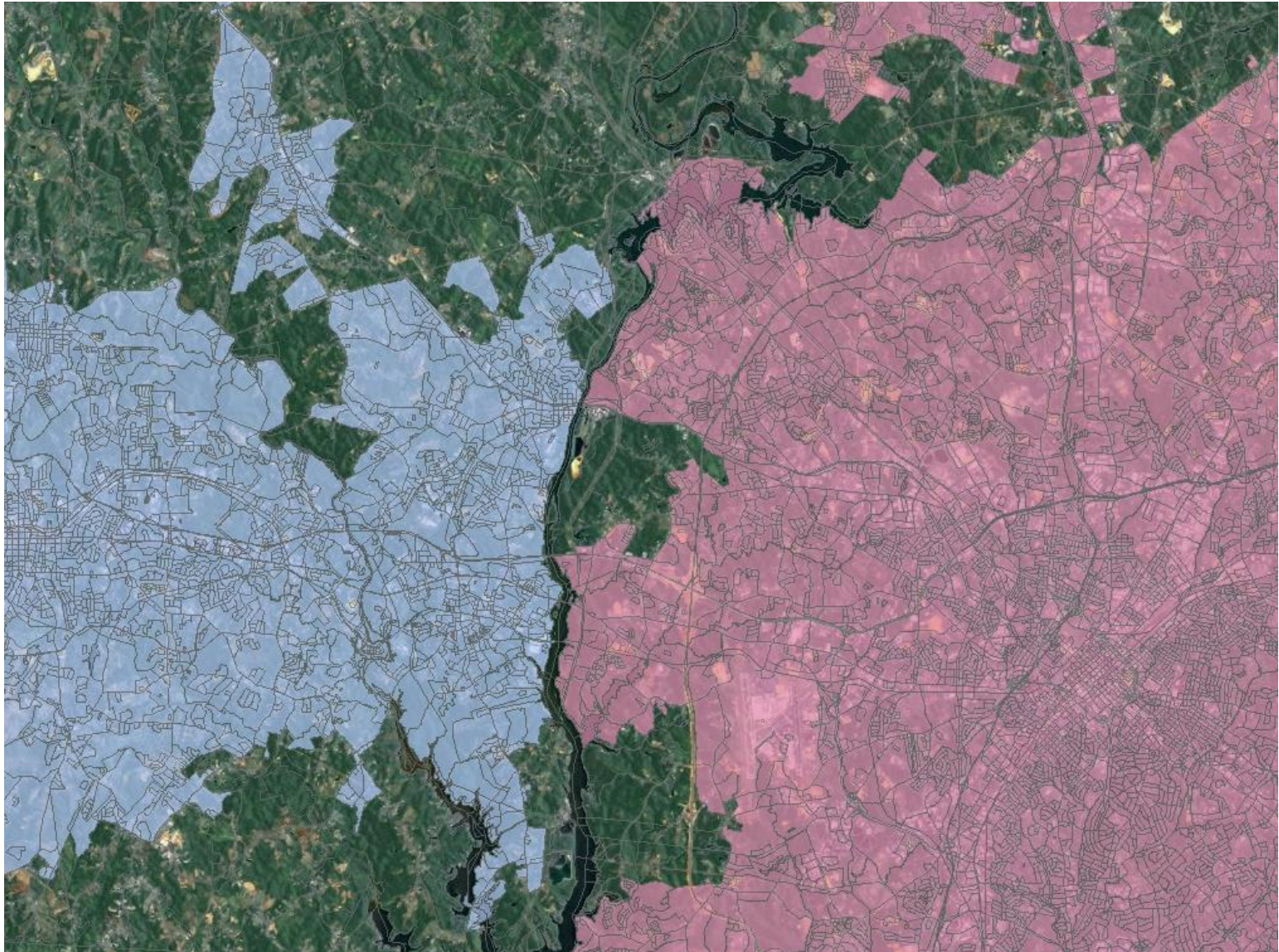
Fort Irwin, CA: 2010 Boundary



Splitting Urbanized Areas for the 2010 Census



Splitting Urbanized Areas for 2010 Census



Urban and rural as used by various programs and researchers:

Classifications tend to be dichotomous:

- Urban and Rural;
- Metropolitan and Nonmetropolitan
- Rural/nonmetropolitan are residual categories

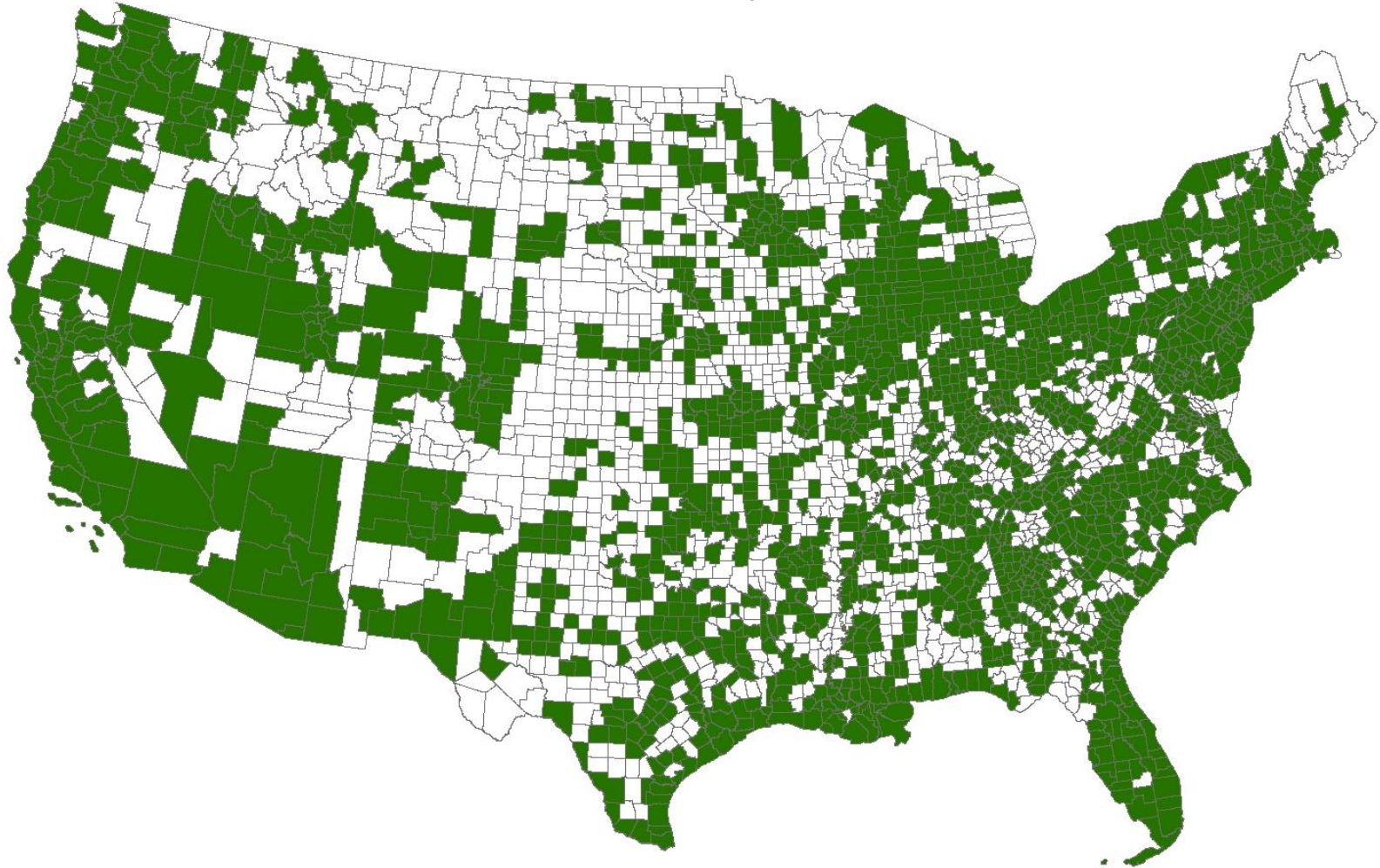
Classifications tend to describe:

- Form (settlement patterns); or
- Function (economic and social relationships)

Metropolitan and Micropolitan Statistical Areas

- Metropolitan statistical areas contain at least one urbanized area of 50,000 or more people;
- Micropolitan statistical areas contain at least one urban cluster of at least 10,000 and less than 50,000 people.
- Represent functional urban regions.
- Central counties defined based on urbanization
- Outlying counties included based on commuting ties

Metropolitan and Micropolitan Statistical Areas (February 2013)



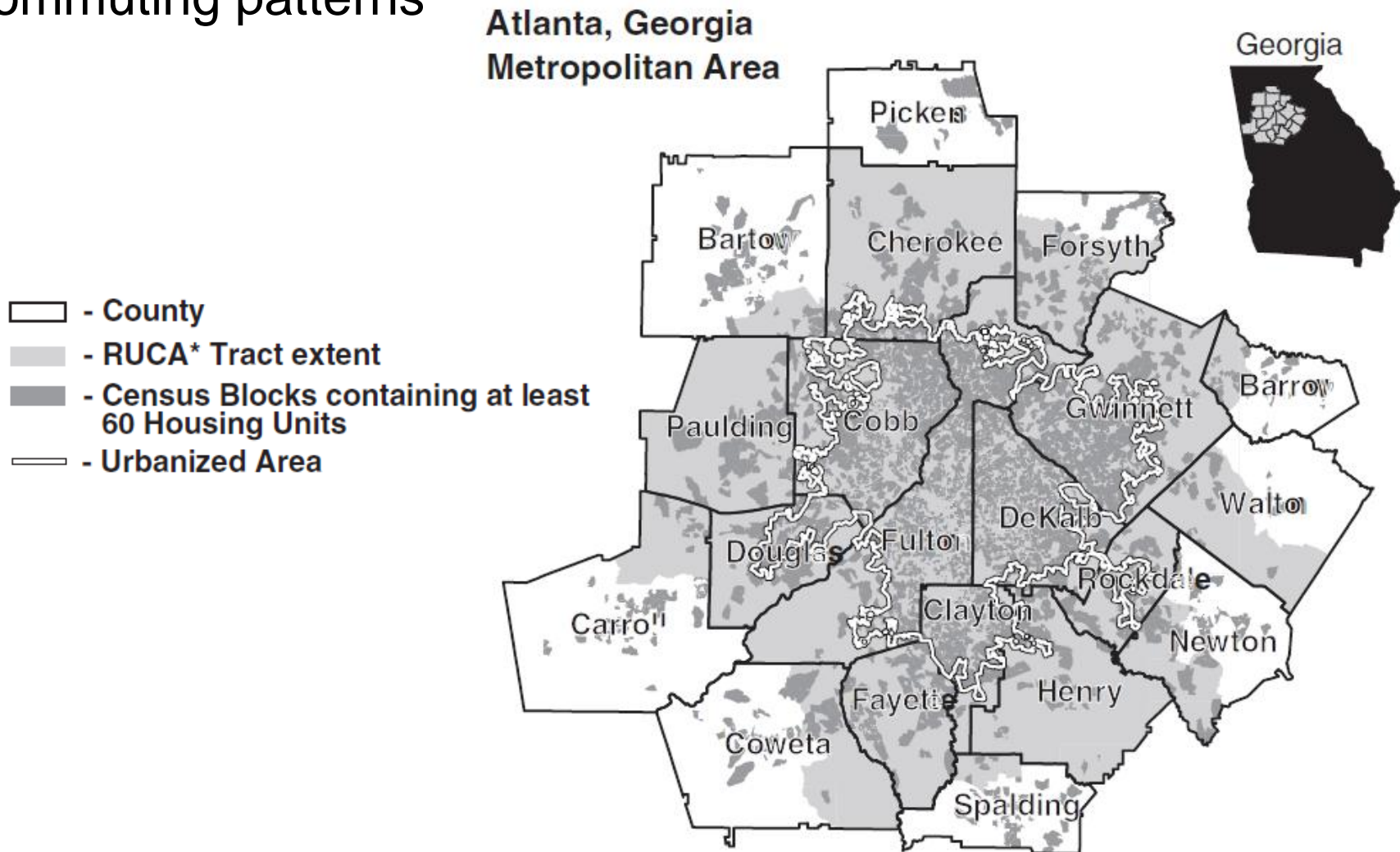
What about “suburban?”

- The Census Bureau does not officially define “suburban.”
- Two generally accepted approaches:
 - Inside metro area, outside principal city
 - Potentially overbounds suburban extent
 - Includes exurban and rural territory
 - Inside urbanized area, outside central place (now, outside principal city)
 - Was referred to as “urban fringe” in Census Bureau data products from 1950-2000
 - Potentially underbounds suburban extent
 - Excludes exurban development

Exurban development: Glenwood urban cluster, Howard County, MD, Baltimore-Columbia-Towson Metro Area



Extended Urban Area: Census Bureau urbanized area with additional territory based on housing density and commuting patterns



Questions:

2010 Census Urban Area Delineation Team:

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Vince Osier – Chief, Geographic Standards and Criteria Branch (GSCB)

Kevin Hawley – Team Lead, GSCB

Chris Henrie – Geographer, GSCB

Ted Sickley – Geographer, GSCB

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